

STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL DIVISION OF WATER

WETLANDS & SUBAQUEOUS LANDS SECTION

89 KINGS HIGHWAY DOVER, DELAWARE 19901 TELEPHONE (302) 739-9943 FACSIMILE (302) 739-6304

Mr. Charles P. MacIntosh U.S. Army Corps of Engineers Philadelphia District 100 Penn Square East Philadelphia, PA 19107 Water Quality Certification: WQ-071/13

Date of Issuance: 12/18/2013

Expiration Date: 12/18/2018

Amended Date:

Tax Parcel No.: No Tax Parcel No. – Waters of the State of Delaware

WATER QUALITY CERTIFICATION GRANTED TO U.S. ARMY CORPS OF ENGINEERS

To conduct economic loading, the practice of filling dredge hoppers past the point of overflow to increase the material load and to increase dredging efficiency in Sub-Reaches E-6 through E-9. This practice will result in a discharge of unsettled material overboard into the Delaware Bay during the dredging of approved sub-reaches in Reach E of the Delaware Bay Navigation Channel.

The Delaware Bay Navigation Channel in Reach E is a 1,000 foot wide channel with a proposed depth of 45 feet at mean low water + 1 foot overdredge. Reach E consists of 9 subreaches and extends from approximately Smyrna, Kent County, Delaware to the lower Delaware Bay, near its confluence with the Atlantic Ocean in Sussex County, Delaware.

Pursuant to the provisions of 7 Del. C., §6003, the Department's "Regulations Governing the Control of Water Pollution," the Department's "Surface Water Quality Standards" and Section 401 of the Clean Water Act, permission is hereby granted on this day of A.D. 2013 to perform the above referenced project in accordance with the approved plans for this Water Quality Certification (Certification) (3 Sheets), as approved on June 21, 2013; and the application dated February 21, 2013 and received by this Division on February 25, 2013, with additional information received on various dates.

Whereas, pursuant to the provisions of 7 <u>Del. C.</u> §7203, the Secretary of the Department of Natural Resources and Environmental Control through his duly authorized representative finds that it is not contrary to the public interest if this project is approved subject to the terms and conditions herein set forth.

Whereas, pursuant to the provisions of Section 401 of the <u>Clean Water Act</u>, 33 <u>U.S.C</u> Section 1341, and 7 <u>Del. C.</u>, Chapter 60, the State of Delaware, by and through the Department of Natural Resources and Environmental Control, certifies that the permitted activity will be conducted in a manner which will not violate the applicable water quality standards of the State of Delaware, subject to the terms and conditions of this approval.

This Water Quality Certification is issued subject to the following conditions:

SPECIAL CONDITIONS

- 1. This Certification authorizes dredging using economic loading for the Sub-Reaches E-6, E-7, E-8 and E-9 in Reach E in the Main Channel of the Delaware River. Dredging using economic loading is authorized as needed once for each approved sub-reach prior to expiration of this permit.
- 2. This Certification authorizes economic loading in Sub-Reaches E-6, E-7, E-8 and E-9. This Certification does not authorize economic loading in Sub-Reaches E-1, E-2, E-3, E-4 and E-5.
- 3. The dredging, economic loading and sand placement window for Sub-Reaches E-6, E-7, E-8 and E-9 shall extend from September 15 of Calendar Year 1 to April 15 of Calendar Year 3. Mobilization activities on Broadkill Beach may not begin before August 15 of Calendar Year 1 and demobilization activities on Broadkill Beach must be completed by April 15 of Calendar Year 3. Sand placement and/or grading are not allowed before September 15 of Calendar Year 1 or after April 15 of Calendar Year 3. This authorization allows construction to occur within and not exceed a period of 19 consecutive months.
- 4. Monitoring of the dredging in Sub-Reaches E-6 through E-9 shall be completed in accordance with the document titled "Section 01 57 19 Turbidity Monitoring," revised June 7, 2013 and July 2, 2013. All monitoring data collected for the monitoring reports shall be submitted by the Army Corps of Engineers to the Wetlands and Subaqueous Lands Section within 1 working day of the COE's receipt of the monitoring data.
- 5. If the turbidity levels exceed the Nephelometric Turbidity Unit (NTU) limit specified by the approved monitoring plan(s), best management practices shall be employed to lower the NTUs to acceptable limits. If levels continue to exceed the approved NTUs, economic loading shall be discontinued until acceptable NTU levels can be attained. The Wetlands and Subaqueous Lands Section shall be notified within 24 hours of any monitoring events where the turbidity levels exceeded the NTU limits specified by the monitoring plan.
- 6. Pre- and post-bathymetric surveys shall be submitted on a disk to the Wetlands and Subaqueous Lands Section within 30 days of the completion of the dredging.

- 7. Horseshoe crabs are a species of biological and economic importance to the State of Delaware and a portion of the horseshoe crab population spawns on Broadkill Beach. To limit impacts to horseshoe crabs and provide the necessary project window to assure completion of the dredging and beach nourishment project, the Department will allow beach nourishment to occur during only one horseshoe crabs spawning season. All beach nourishment activities including sand placement and grading shall be completed in its entirety and the beach shall be ready for use by horseshoe crabs no later than April 15 of Calendar Year 3.
- 8. To further minimize impacts to horseshoe crabs between April 15 and May 31 all horseshoe crabs visible on the beach within 1000 feet of the advancing placement pipeline shall be relocated to the shoreline of the completed beach section behind the discharge point or to the shoreline at a location along the Delaware Bay shoreline outside of the project area. The beach area shall be inspected for horseshoe crabs 2 times daily at approximately high tide for Roosevelt Inlet. Horseshoe crabs being relocated must not be held out of water for more than 1 hour before being relocated to water. For information regarding horseshoe crabs contact John Clark, Environmental Program Administrator, Delaware Division of Fish and Wildlife, Fisheries Section at (302) 739-9108 or John.Clark@state.de.us.
- 9. Blue crabs are a species of biological and economic importance to the State of Delaware. A portion of the blue crab population overwinters in the shipping channel during winter months. To minimize impacts to overwintering blue crabs, dredging shall be completed, as practicable, outside of the period December 1 to March 31. For any dredging activity occurring between December 1 and March 31, the COE shall provide notice of the proposed dredging schedule and dredging location 30 days prior to dredging to John Clark, Environmental Program Administrator, Delaware Division of Fish and Wildlife, Fisheries Section at (302) 739-9108 or John.Clark@state.de.us. The purpose of this notification is to provide an opportunity to harvest crabs from the channel prior to maintenance dredging.
- 10. To avoid impacts to endangered species, the permittee shall comply with Terms and Conditions which implement Reasonable and Prudent Measures as described in the National Marine Fisheries Service July 2012 Biological Opinion (and any subsequent amendments). The reporting requirements outlined in the BO should also be followed for the Division of Fish and Wildlife. Observations of and interactions with ESA species should be reported to Rob Hossler, Program Manager, Delaware Division of Fish and Wildlife, Species Conservation and Research Program, at (302) 755-3602 or Robert.Hossler@state.de.us.
- 11. To minimize the potential for unexploded ordinance to enter the dredge, a screen device capable of screening out objects 1.5 inches in diameter or larger, shall be employed during all dredging operations. Screens shall be inspected daily to ensure their functionality.
- 12. The end of the discharge line shall be monitored during pumping operations. If any particles larger than 1.5 inches in diameter are observed, dredging operations shall be shut down until screening devices are functioning properly.
- 13. This Water Quality Certification is valid for a period of five (5) years from the date of issuance.

GENERAL CONDITIONS

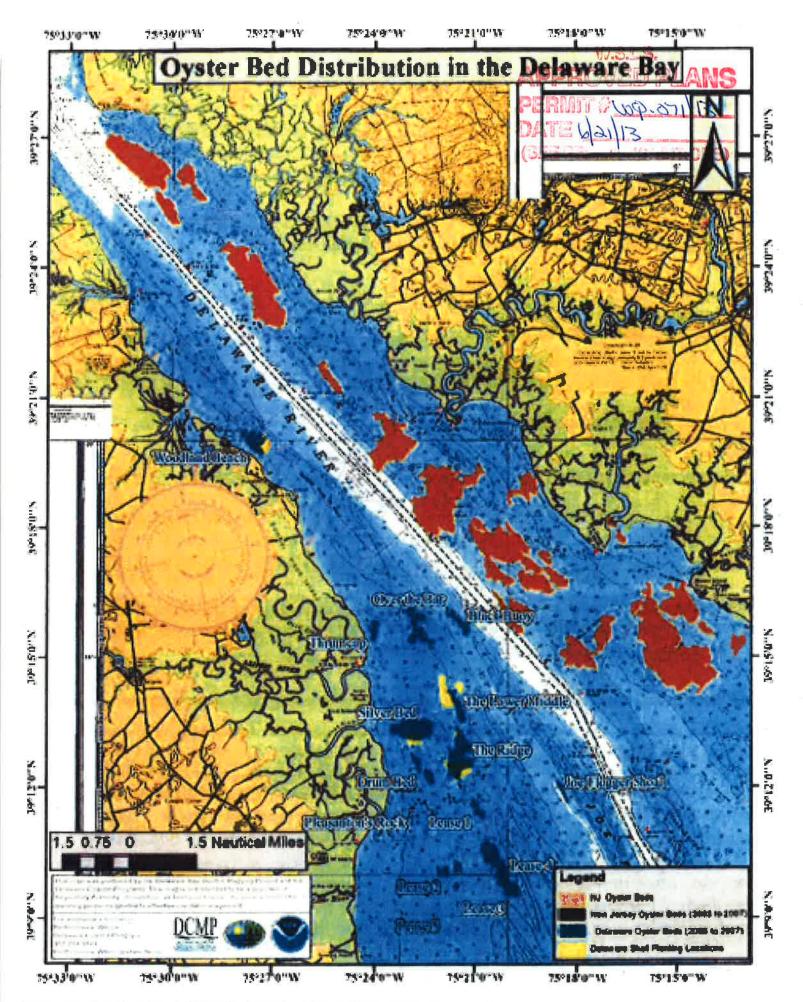
- 1. This Certification is granted for the purpose of performing economic loading, the practice of filling dredge hoppers past the point of overflow to increase the material load and to increase dredging efficiency resulting in a discharge of unsettled material. Any other use without prior written approval shall constitute reason for this Certification being revoked.
- 2. The permittee and contractor shall at all times comply with all applicable laws and regulations of the Department of Natural Resources and Environmental Control.
- 3. The activities authorized herein shall be undertaken in accordance with the permit conditions, the final stamped and approved plans, and with the information provided in the permit application.
- 4. A copy of this Certification and the stamped approved plans shall be available on-site during all phases of construction activity.
- 5. This Certification is granted for the purpose of providing adequate depths for maintaining the navigable depths in the Federally Designated Channel. Any other use without prior written approval shall constitute reason for this Certification being revoked.
- 6. The conditions contained herein shall be incorporated into any and all construction contracts associated with the construction authorized herein. The permittee and contractor are responsible to ensure that the workers executing the activities authorized by this Certification have full knowledge of, and abide by, the terms and conditions of this Certification.
- 7. The issuance of this Certification does not constitute approval for any activities that may be required by any other local, state or federal government agency.
- 8. The issuance of this Certification does not imply approval of any other part, phase, or portion of any overall project the permittee may be contemplating.
- 9. All dredging and filling is to be conducted in a manner consistent with sound conservation and water pollution control practices.
- 10. This Certification authorizes only the activities described herein. Modifications to the project may require a supplemental approval from this office prior to the initiation of construction. A determination of the need for a supplemental approval will be made by this office pursuant to the permittee submitting written notification and revised plans indicating project changes. Failure to contact the Department prior to executing changes to the project shall constitute reason for this Certification being revoked.
- 11. Representatives of the Department of Natural Resources and Environmental Control shall be allowed to access the property to inspect all work during any phase of the construction and may conduct pre and post-construction inspections, collect any samples or conduct any tests that are deemed necessary.

- 12. The activities authorized herein shall be conducted so as not to violate the State of Delaware's Surface Water Quality Standards, as amended June 11, 2011.
- 13. All construction materials, waste, or debris associated with this activity shall be properly disposed of and contained at all times to prevent its entry into waters or wetlands. Construction materials shall not be stockpiled in subaqueous lands or wetlands.
- 14. Disturbance of subaqueous lands or wetlands adjacent to the authorized structures or activities is prohibited. Disturbance of subaqueous lands or wetlands in the path of construction activity shall be minimized. Any temporarily impacted subaqueous lands or wetlands shall be returned to pre-disturbance elevations and conditions.
- 15. The permittee and contractor shall employ measures during construction to prevent spills of fuels, lubricants or other hazardous substances. In the event of a spill, the permittee and contractor shall make every effort to stop the leak and contain the spill, and shall immediately contact the Hazardous Spill Response Team (HAZMAT) at 1-800-662-8802 and this office at (302) 739-9943. The permittee and contractor are responsible to comply with all directives to contain and clean up the spilled material(s) as stipulated by the HAZMAT team, and to restore the site as may be required by this office.
- 16. None of the construction activities authorized herein shall occur after the construction expiration date identified on Page 1 of this Certification. The permittee may file one construction expiration date extension request of up to one (1) year if necessary to complete the authorized work. Such requests must be received by the Department at least thirty (30) days prior to the construction expiration date.
- 17. The permittee shall notify the Wetlands and Subaqueous Lands Section prior to the commencement of the work authorized by this Certification.
- 18. The permittee shall maintain all authorized structures and activities in a good and safe condition.
- 19. Any actions, operations or installations which are found by the Department to be contrary to the public interest may constitute reason for the discontinuance and/or removal of said action, operation or installation. Removal and restoration shall be at the expense of the permittee and/or upland property owner within thirty (30) days of receipt of written notice of revocation and demand for removal.
- 20. This Certification is personal but may be transferred provided the permittee provides prior notice to the Department of the intent to transfer and the new property owner provides appropriate documentation to substantiate ownership of the adjacent upland property and/or the structures authorized herein. Failure to transfer this Certification to a new owner may result in the revocation of the Certification and the removal of all structures authorized by this Certification at the expense of the permittee.

21. Failure to comply with any of the terms or conditions of this Certification may result in enforcement action, which could include the revocation of this Certification, and subsequent restoration of the site to preconstruction conditions.

IN WITNESS WHEREOF, I, Virgi	l R. Holm	es, the duly authorize	ed representative of Collin
P. O'Mara, Secretary of the Department of	of Natural	Resources and Env	rironmental Control, have
hereunto set my hand this	_ day of	December	, 2013.
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By Virgil R. Holmes, the duly authorized representative of the Secretary of the Department of Natural Resources and Environmental Control



igure 3. Oyster Bed Distribution in the Delaware Bay





Figure 2. Reach E Economic Loading Sub-Reaches



APPROVIDE PLANTS
PERMIT O WO-STILLS
PATE USUATIONS



DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL CONTROL

NOTICE OF AUTHORIZATION

Delaware Bay Navigation Channel. point of overflow to increase the material load and to increase dredging efficiency in Sub-Reaches E-6 through E-9. This practice will Permit/Lease No. and Description: WQ-071/13 To conduct economic loading, the practice of filling dredge hoppers past the result in a discharge of unsettled material overboard into the Delaware Bay during the dredging of approved sub-reaches in Reach E of the

confluence with the Atlantic Ocean in Sussex County, Delaware. overdredge. Reach E consists of 9 sub-reaches and extends from Smyrna, Kent County, Delaware to the lower Delaware Bay, near its The Delaware Bay Navigation Channel in Reach E is a 1,000 foot wide channel with a proposed depth of 45 feet at mean low water + 1 foot

Issued to: U.S. Army Corps of Engineers
Location of Work: Same as above

Date of Construction Expiration: 12/13/2018

DISPLAY THIS CERTIFICATE IN A HIGHLY VISIBLE LOCATION ON THE JOB SITE.

Wetlands & Subaqueous Lands Section